

REMARKS

The allowability of claims 3, 4, 7, 9 10, 12 and 13 is acknowledged appreciatively.

The rejections of claims 1 and 4 under 35 USC 112 for inclusion of "or the like" are traversed by deleting the phrase. Phrase deletion should not invoke any Festo-like limitations even if in response to a statutory requirement.

The rejections of claims 5-14 for antecedinal inconsistencies are traversed by editorial corrections. Editorial corrections should not invoke any Festo-like limitations even if in response to a statutory requirement.

The rejection of claim 1 and, thus, the other claims under 35 USC 102 for anticipation by the cited Grant, Jr., et al. patent is traversed by the claimed piston element that is provided with the second burst disk.

A claim is anticipated only if each and every element as set forth in the claim is found, wither expressly or inherently described, in a single prior art reference. *MPEP* 2131.

The rejection for anticipation should not be converted into one under 35 USC 103 for obviousness, because the cited Grant, Jr., et al. patent relates to a very complicated valve device that, despite its complication, still does not provide the important feature of claim 1. The piston 20 is not provided with a second burst disk, as claimed. If one takes a closer look to the Fig. 1 of the the cited Grant, Jr., et al. patent, one can notice that the second frangible disc 49 is held, instead, by a plug 37 against a shoulder 42 formed by the recess 36.

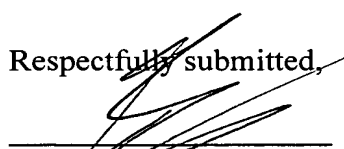
The rejection for anticipation should not be converted into one under 35 USC 103 for obviousness, because the structural difference of the patent is what leads to its complicated channel arrangements. These can lead to the drawbacks mentioned in the present application.

One of the drawbacks of this solution is that the piercing element is returned by the action of pressure back to its original position, so a piece of the burst disk that may have been detached from it by the piercing action may partially block the passage and thus form an obstacle to the flow of pressure medium. In addition, the piercing element has to go completely through the burst disk in order to produce a hole of the desired size in the disk. If the piercing movement is for some reason incompletely executed, it will not produce a hole of the desired size.

The solution of the invention has numerous significant advantages. The passage through the piston ensures that, after the second burst disk provided in the piston element has been pierced, the piston will be effectively pressed towards the first burst disk. The solution of the invention is leak-proof and reliable. By using a smaller second burst disk, it is possible to avoid the use of large actuators requiring a great power for the triggering action. By using an intermediate piece, such as a ball, reliable piercing of the second burst disk is achieved and additionally a situation is avoided where the piston of the actuator remains in contact with the second burst disk and no sufficient hole is produced in the burst disk. By employing two-stage triggering of the valve element, such that, during the first stage, the piercing of the second burst disk produces a flow of pressure medium into the cylindrical chamber, thereby causing the piston-piercer combination to move vigorously towards the first burst disk and pierce it, reliable operation of the valve element is achieved, ensuring that the passage from inlet to outlet is reliably opened. The valve element of the invention is thus excellently suited for use in fire extinguishing systems.

Reconsideration and allowance are, therefore, requested.

Respectfully submitted,



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